DOCUMENT RESUME

ED 372 545 EC 303 177

AUTHOR Graham, Marilyn T.; Isom, Rebecca M.
TITLE Bad Test...Good Test: Designing Classroom Tests To Accommodate Disabled Learners.
PUB DATE 7 Apr 94
NOTE 30p.; Paper presented at the Annual International Convention of the Council for Exceptional Children (72nd, Denver, CO, April 6-10, 1994).
PUB TYPE Speeches/Conference Papers (150) -- Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Disabilities; Elementary Secondary Education; *Teacher Made Tests; *Test Construction; Test Format

ABSTRACT

This paper, presented in an outline format, provides general suggestions for the format of classroom tests and offers guidelines for adapting commercial tests that accompany textbooks for students with disabilities. Suggestions include, for example, using visual prompts to focus attention on important words, symbols, or procedures; and not requiring use of a separate answer sheet. The paper then presents tips for constructing specific types of tests, such as fill in the blank, multiple choice, matching, true-false, math computations, and structured essay. Eighteen short tests are appended as examples of test construction strategies. (JDD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 372 545

BAD TEST . . . GOOD TEST:

DESIGNING CLASSROOM TESTS TO ACCOMMODATE DISABLED LEARNERS

PRESENTED AT THE

COUNCIL FOR EXCEPTIONAL CHILDREN
ANNUAL CONVENTION
DENVER, COLORADO

by

MARILYN T. GRAHAM, PROFESSOR
DEPARTMENT OF SPECIAL EDUCATION
RADFORD UNIVERSITY
RADFORD, VIRGINIA 24142

and

REBECCA M. ISOM, SED TEACHER
CARROLL COUNTY PUBLIC SCHOOLS
WOODLAWN ELEMENTARY SCHOOL
WOODLAWN, VIRGINIA

April 7, 1994

BEST COPY AVAILABLE

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Marilyn T. Graham
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC).

EC 303177

I. Multiple Choice

1. Having information about yourself is called
   a) self-concept c) self-discipline
   b) self-knowledge d) value

2. When you cannot live out what you would like to do, you are using a defense mechanism called
   a) displacement c) projection
   b) rationalization d) self-knowledge

3. When you have a good self-concept, you see yourself as a
   a) loser b) day-dreamer c) mature person d) winner

4. A measure of your physical, mental, and social growth is your
   a) displacement c) maturity
   b) self-concept d) rationalization

5. Something you work toward continually is a
   a) displacement b) value c) goal d) change

6. The effort you make to work on your plans and goals is
   a) self-discipline c) a value
   b) self-concept d) adjustment

7. A term which means an adjustment to daily pressures is call
   a) rationalization c) compensation
   b) displacement d) a defense mech

8. Substituting one behavior for another is
   a) compensation c) dis
   b) self-concept d)

9. All of the following are exa
   a) displacement
   b) compensation

0. The feeling y
   a) self-di
   b) self-c

I

. When you exerc
   a) food

. A regular exercis
   a) heart b)

. Atherosclerosis is c
   artery walls.
   a) carbon b) fat

. A substance in the blood deposits in arteries is
   a) a LDL b) oxygen

. The amount of blood pumped by
   a) stroke volume
   b) heartbeat

. A term used in connection with
   a) positive pressure
   b) negative pressure

. The smoke a smoker inhales directly
   _____ smoke.
   a) mainstream b) sidestream c)

. A person addicted to alcohol is called a
   a) bum b) drunk c) alc

. The smoke inhaled by a nonsmoker is called
   a) mainstream b) sidestream c) downstr

. Each of the following terms applies to alcohol
   a) addiction b) not curable c) treatable

. A cigarette will burn for approximately _____ min
   a) 4 b) 8 c) 12

. Smokeless tobacco is tobacco that is snuffed or
   a) chewed b) eaten c) put in a pipe d)

. Compared to nonsmokers, smokers have a higher rate of
   a) influenza b) ulcers c) heart disease d) ost

. Alcohol leads to accidents because it affects coordination a _____ time.
   a) reaction b) blinking c) sleeping d) attracti

Use Answer Sheet. Do Not Mark on Test!

IV True or False

1. Stroke volume decreases when you have a regular exercise pr
2. Exercise can help keep blood pressure normal.
3. LDLs do not help prevent atherosclerosis.
4. Regular exercise can help you maint
5. Cardiovascular fitness can

1. Peer pressure
   person.
2. An

Name: _____

Date: _____

English 10R

"Life is Sweet at Kumansenu"

MULTIPLE CHOICE DIRECTIONS: Write the letter of the best answer on the line provided.

1. The setting for "Life is Sweet at Kumansenu" is
   A. South Africa
   B. Southeast Asia
   C. Africa

2. The children Bola had before Meji's birth have a
   A. died in infancy
   B. been stolen by a witch doctor
   C. been born with a special mark

3. Meji worked as a
   A. government clerk
   B. professional soldier
   C. photographer

4. When Bola tells the others of Meji's vi
   A. says he will pay for a community c
   B. asks her to wait for three days
   C. says she should tell no one at a

5. Meji's reason for his decision is t
   A. wants to see his old friends
   B. is afraid his friends will be
   C. hates crowds

6. Meji takes Asi for a walk
   A. along the seashore
   B. through a nearby forest
   C. to the village

7. After visiting his father'
   A. sad
   B. as if he will die so
   C. closer to his fathe
   D. from his

Acknowledgement

I wish to express my deepest appreciation to Judy Wood, Professor, Virginia Commonwealth University. In the early 1980s I attended one of Judy's inspiring and practical workshops on adapting evaluation materials. I immediately began to collect samples of inappropriate classroom tests actually used in public schools. These now serve as the introduction to our test adaptation demonstration. I also frequently refer to Judy's materials in my special education classes at Radford University. So thanks so much, Judy Wood, for guiding many professionals in improving assessment practices in the public schools.

DESIGN AND MODIFICATION OF CLASSROOM TESTS

I. GENERAL SUGGESTIONS FOR FORMAT

A. Do not crowd items.

1. Allow adequate margins.
2. Allow adequate space between items.
3. For some students, severely limit the number of items on a page.

B. Provide neat, readable copies.

1. Handwriting, either cursive or manuscript, must be legible, i.e., conform to standard writing quality.
2. Use a ruler for all hand drawn lines.
3. Use a typewriter or computer to prepare tests when possible.
4. Darken copies as needed, using darkening function on xerox machine.
5. Enlarge print as needed, using copier function, for students with visual impairments.
6. Discard smudged, blurry, or faded test pages - replace with clean, clear pages.

C. Give clear, short directions, using simple words.

1. Provide a written example of response if answer format is complex or unfamiliar.

D. Selectively use visual prompts to focus attention on important words, symbols, or procedures.

1. Use a colored pen to underline, highlight, or circle a word.
2. Use the "bold" function on the computer.
3. Capitalize or underline special words on typewriter, computer, or by hand.

E. Put a colored border around test page.

1. The easiest way to do this is to staple or tape test page to sheet of construction paper. The "boundary" seems to help some students focus better on the task.

F. Keep all test items of the same type together on page.

1. Try not to have more than two item types on a page. If you must, e.g., half a page of true-false and half a page of fill in the blank, then clearly separate them with a line and the new directions.

G. Do not require use of separate answer sheet.

1. Permit disabled learners to mark the answers on the test itself.

2. If there are choices, permit students to cross out those they know to be wrong.

H. Present content in a clear, straight-forward manner.

1. Use simple, important words.

2. Eliminate unnecessary words.

3. Occasionally you may need to add a more familiar synonym, in parentheses, for a more difficult proper term.

4. Use simple direct sentence structure, e.g., subject, verb, direct object.

5. Do not use tests that require the unscrambling of letters in words to get the right answer.

6. In general, design relative short tests.

II. ADAPTING COMMERCIAL TESTS (those accompanying adopted textbooks)

A. Xerox test pages, then cut apart sections and enlarge if necessary to increase readability.

1. Inappropriate or poorly constructed sections or items may also be deleted by the cut-and-tape method.

B. Mark out sections or items on test that student does not need to complete.

1. On true-false or for any format, you may want to mark out every other item.

2. Parts or half of certain types of sections may be crossed out.

3. For multiple choice, cross out one or two distractors, leaving 2-3 reasonable choices.

4. For matching, cross out extra distraction or choices if they occur.

C. Direct attention to key words and directions.

1. See I. - D. above.

D. Redesign the commercial materials.

1. Make a simplified, parallel version of the same test.

2. Redesign selected sections to increase clarity and reduce complexity of the response task.

III. FILL IN THE BLANK

A. Use a word bank in box at top of page; do not include distractors.

B. Section must be complete on a single page.

C. Include no more than ten sentences.

D. Make "fill-in" lines in sentences of uniform size and long enough for large handwriting.

E. Modified Fill in the Blank: provide two choices in parentheses under the blank (or beside the blank).

- The students _____ understand.
  (do, does)

- John _____ a cold.
  (has, have)

IV. MULTIPLE CHOICE

A. Place the choices vertically, not horizontally.

a. ____
b. ____
c. ____
d. ____

B. Underline key words - like only, except, not.

C. Have no more than four (4) choices.

D. Avoid "all of the above," "none of the above," "a and b only."

V. MATCHING

A. Include no more than 8-10 items.

B. All items must be on one page.

C. Usually, the left column should have the shortest cue, e.g. name or fewest words (Example: 1. ___ Einstein).

D. Do not add extra distractors.

E. Permit students to cross out items as they use them.

VI. TRUE - FALSE

A. Put " T F " at left side of statement; students circle their choice.

B. Avoid double negatives.

C. Underline key words like always, never, not, except, and so forth.

D. Write clear, simple, absolute statements.

E. **Modified true-false:**

Directions: Only one statement is true in each of the sets of sentences below. Put T in the blank beside the true statement.

Example: A. T A cold is a communicable disease.
B. ___ Colds are caused by too much exercise.

1. a. ___ Tapeworms are roundworms

   b. ___ Athlete's foot is caused by a fungus.

2. a. ___ Periodontal disease is a disease of the gums.

   b. ___ A sticky film of harmful bacteria on the teeth is called caries.

3. a. ___ (continue)

   b. ___

VII. MATH COMPUTATIONS

A. Limit the number of problems on a page.

B. Leave sufficient space for calculations.

C. Draw boxes around the problems and spaces, i.e., separate problems.

D. Give example of the expected format and answer treatment.

E. Test items should have same format as was taught.

F. Color code, highlight, or underline operation signs (+ - x ÷).

G. Arrange math problems from simple to complex.

H. Provide algorithms or formulas.

VIII. STRUCTURED ESSAY

A. Provide the general topic statement of the essay as well as subtopics.

1. list the minimum ingredients that you wish to have included in the essay.

2. example of an essay topic: "Compare appropriate and inappropriate teacher-made tests for students with disabilities."

3. the above statement does not give sufficient direction - even for a professional like you - as to the teacher's expectations

4. it is important to state the additional subtopics that must be addressed

5. Subtopic example: "At minimum, discuss the following: five general rules for designing appropriate tests, at least three types of tests with examples of effective and ineffective formats, and how "bad tests" and "good tests" affect the students who must take them."

6. **Some experts say to eliminate the essay test for students with disabilities and to use only objective tests.**

   We suggest that this approach might be discriminatory. Students with disabilities need to have the opportunity to develop higher level cognitive skills and, in Virginia, to gain essay writing experience in order to be successful on the writing section of the Literacy Passport Test.

   However, students need to be taught essay writing strategies before they are tested by means of this format. They need extensive direct instruction, guided practice, and feedback in order to develop writing skills.

HEALTH TEST

CHAPTER 2

NAME:_____

DATE:_____

Read the following statements. On the line to the left write the word TRUE if the statement is true or the word FALSE if the statement is false.

_____ 1. Pets can sometimes help meet some people's needs.

_____ 2. A friend is a person who is not liked.

_____ 3. A friend is someone who meets some of your needs.

_____ 4. A friend should help you feel important.

_____ 5. In some ways, pets and friends are similar.

_____ 6. It is not important to keep old friends.

_____ 7. Friends should share different ideas.

_____ 8. Sharing what you think and feel with another person is called communication.

_____ 9. Repeating what others have told you in confidence is an important communication rule.

_____ 10. Being grateful means being thankful.

MATH 8
DIVISION TEST

NAME: _____
DATE: _____

DIRECTIONS: Divide these problems. Place the remainder on the line after the letter R. If there is no remainder, write 0 after the R. See the EXAMPLE in the first box. Remember the steps in division:

DIVIDE, MULTIPLY, SUBTRACT, BRING DOWN

EXAMPLE

$$6\overline{)1457} \quad 242 \text{ R } 5$$

-12

25

-24

17

-12

5

① $4\overline{)3293}$ R ___

② $8\overline{)3478}$ R ___

③ $9\overline{)4571}$ R ___

④ $7\overline{)7654}$ R ___

⑤ $6\overline{)4578}$ R ___

ENLARGED FOR A VISUALLY DISABLED STUDENT

Name Stephanie (1)

True/False

For the sections below, circle T or F for each statement as it applies to the law or legal requirement indicated.

PL 94-142 (EHA - 1975) requires:

1. T F procedural due process rights for parents of students with handicaps
2. T F IEP to be prepared for qualified students
3. T F mainstreaming required for all students with handicaps
4. T F transition services must be stated on the IEP
5. T F disabled students from birth through age 21 will be served
6. T F referred students must be tested in English in order to achieve standardized results
7. T F parents will pay reasonable transportation costs to get their children to and from school
8. T F requires "child find" activities
9. T F the IEP will describe the students present level of functioning

III. Applying Concepts

A student is preparing gelatin (Jello) with fruit by the following recipe. Choose the correct word to fill in the blank after each step. Choose your answers from the word box.

mixture	heterogeneous	compound
homogeneous	physical	

STEP ONE: Boil one cup of water.

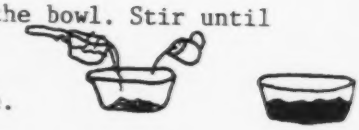
1. The water is a _____.

STEP TWO: Pour gelatin mix into a bowl.

2. The dry gelatin mix is a _____ mixture.

STEP THREE: Add the cup of boiling water to the gelatin in the bowl. Stir until fully dissolved. Then stir in one cup of cold water.

3. The bowl now contains a _____ mixture.



STEP FOUR: Refrigerate for two hours. The gelatin will thicken.

4. The gelatin has undergone a _____ change.

STEP FIVE: Drain the fruit cocktail. Add the fruit to the thickened gelatin. Stir gently and refrigerate one hour or until gelatin is completely set.

5. The gelatin with fruit is a _____.

* This adapted test was based on a very complex and confusing commercial test.

Unit Test 2

English 10R

Name: _____

Date: _____

Directions: Choose the correct word from the WORD BANK and write it next to the phrase that defines it.

WORD BANK

foreshadowing	climax	introduction
protagonist	plot	resolution
conclusion	theme	complication

_____1. The underlying main idea of a story.

_____2. The chief character of a story

_____3. Settles the outcome of a conflict.

_____4. A technique used by a writer to give the reader hints as to what will happen next.

_____5. Sets the stage for the action that will follow by introducing characters and/or describing the setting for the story.

_____6. Stops the action.

_____7. Order in which events occur in a story.

_____8. Make the problem more difficult to solve.

_____9. Presents the opposing forces at the peak of their struggle.

World Geography
Chapter 7 Test

Name _____
Date _____

Fill in the blanks using words from the word bank.

WORD BANK

earthquakes	coral	Arawak
Carib	volcanic ash	fertile

1. Some Caribbean islands are made of _____.
2. The _____ Indians were good farmers.
3. Volcanic eruptions can cause _____.
4. _____ adds minerals to soil.
5. _____ soil is rich in minerals.
6. The _____ Indians were warriors.

Fill in the blanks using words from the word bank.

WORD BANK

canal	plantation	independent nation
Creole	conuco system	

1. The _____ is a way of farming.
2. _____ is a language spoken in Haiti.
3. A _____ is a large farm where one crop is grown.
4. An _____ is a country that governs itself.
5. A _____ connects the Atlantic and Pacific Oceans in Panama.

SCIENCE TEST NAME:_____

CHAPTER 7 DATE:_____

ENERGY	OXIDATION	GEOTHERMAL
LIGHT	KINETIC	ELECTRICAL
HEAT	CHEMICAL	

FILL IN THE BLANKS BELOW WITH WORDS FROM THE WORD BOX. EACH WORD IS USED ONLY ONCE.

1. _____ energy is used to make things brighter.
2. _____ is called the ability to move.
3. _____ energy is used to make things warmer.
4. _____ energy is used by your muscles.
5. _____ energy is transferred through wires.
6. _____ energy is called energy of motion.
7. _____ is heated water inside the earth.
8. _____ occurs as oxygen joins other matter.

Choose the best word that completes the sentence.

1. _____ can pass through a cell membrane.
(food, water)

2. A _____ is a one-celled animal.
(man, paramecium)

3. You are made of _____ of cells.
(hundreds, billions)

4. Cells of the same kind that are grouped together form a _____ .
(tissue, organ)

5. A microscope makes things look _____.
(smaller, bigger)

6. Chlorophyll helps plants make _____.
(water, food)

English 10R

Name: _____

"Life is Sweet at Kumansenu"

Date: _____

MULTIPLE CHOICE DIRECTIONS: Write the letter of the best answer on the line provided.

_____1. The setting for "Life is Sweet at Kumansenu" is
A. South Africa
B. Southeast Asia
C. Africa

_____2. The children Bola had before Meji's birth have all
A. died in infancy
B. been stolen by a witch doctor
C. been born with a special mark

_____3. Meji worked as a
A. government clerk
B. professional soldier
C. photographer

_____4. When Bola tells the others of Meji's visit, Meji
A. says he will pay for a community celebration
B. asks her to wait for three days
C. says she should tell no one at all

_____5. Meji's reason for his decision is that he
A. wants to see his old friends happy
B. is afraid his friends will be jealous of him
C. hates crowds

_____6. Meji takes Asi for a walk
A. along the seashore
B. through a nearby forest
C. to the village

_____7. After visiting his father's grave, Meji feels
A. sad
B. as if he will die soon himself
C. closer to his father than ever before

_____8. Meji departs from his father's house
A. at noon
B. at dusk
C. at daybreak

_____9. Meji's death is caused by
A. drowning
B. poisoning
C. being run over by a car

Science

_____
Name

_____
Date

Directions: Put the letter of the correct answer in the blank before the statement. USE EACH LETTER ONLY 1 TIME.

A. great white shark
B. whale
C. chlorophyll
D. plant plankton
E. pollution
F. starfish
G. toothed
H. holdfast

____ makes algae green and helps them make food

____ most dangerous shark

____ animal that is destroying some coral reefs because it feeds on living coral animals

____ used for food for most ocean animals

____ a problem facing animals and plants that live in the ocean

____ largest living animal

____ one group of whales

____ one part of a rockweed

3rd Grade Test

Name _____

Finish each statement in Group A with words from Group B. Write the letter of the correct answer on the blank Line.

Group A

1. Number of players on a team is _____.
2. Number of points in a game is _____.
3. Only the _____ team can score.
4. The ball is hit hard into the opponents court from above the net. _____
5. A team rotates in a _____ manner.
6. A team must win by at least _____ points.
7. Number of hits allowed to get the ball over the net. _____
8. A player can not hit the ball _____.

Group B

A. 3

B. 2

C. Clockwise

D. Spike

E. 6

F. Serving

G. 15

H. Twice In A Row

Matching: Fill in the blank with the appropriate matching letter.

_____ 1. The smallest whole part of a living thing.

_____ 2. The control center of the cell.

_____ 3. The division of two full-grown cells into two cells.

_____ 4. The instrument that makes things look bigger.

_____ 5. The clear liquid inside cells.

_____ 6. Helps protect plant cells

_____ 7. Bends easily and is a very thin cell cover.

_____ 8. It has no nucleus and is being made all the time.

A. protoplasm
B. microscope
C. cell
D. nucleus
E. cell wall
F. red-blood cell
G. cell membrane
H. cell-division

BEST COPY AVAILABLE

PART C: TRUE OR FALSE QUESTIONS.

Circle "TRUE" if the statement is COMPLETELY true or circle "FALSE" if the statement is false.

1. The liberties which mattered most to Americans were the right to taxation by consent, the right to a representative legislature, and the right to trial by a jury of one's peers.

TRUE FALSE

2. At the First Continental Congress the leading "radicals" pushing for the most direct expression of grievances were from the Middle Atlantic colonies.

TRUE FALSE

3. Lord Dunmore's proclaimation helped to undermine support for the patriot cause in colonies dominated by tobacco or rice planters.

TRUE FALSE

4. The British "southern strategy" was doomed to fail because there were very few Loyalists in the Carolina and Georgia upcountry, from the beginning of the war.

TRUE FALSE

5. Most Americans during the "critical period" of the 1780's supported the move to form a more nationalist and stable Federal government.

TRUE FALSE

6. Virginia was the fourth state to ratify the Federal Constitution.

TRUE FALSE

7. The term Federalists meant the same, and applied to the identical number of people in 1787-1788 as did in 1797-1798.

TRUE FALSE

8. 1796 was the first presidential and Congressional election in which there were two distinct political parties; outgoing President Washington preferred the election of Thomas Jefferson to John Adams, but the people decided otherwise.

TRUE FALSE

Name _____

Directions: Write fact or opinion by the sentence.

REMEMBER: A fact is a statement that can be checked. An opinion is a judgement or belief.

Examples: 1. Cats are the best pets to have. opinion
2. Florida is a state. fact

1. Spinach juice has more vitamins than soda has. _____
2. I think spinach juice tastes better than soda. _____
3. Eating ants is disgusting. _____
4. Retaetna spells anteater backwards. _____
5. Europe is a continent east of the Atlantic Ocean. _____
6. Everyone wants to visit Europe. _____
7. Blue is a much better color than yellow. _____
8. It takes one hundred pennies to make $1.00. _____

MATH TEST

CHAPTER 3

NAME: _____

DATE: _____

DIRECTIONS: FOLLOW THE DIRECTIONS TO FIND THE NUMBER (N) IN THE PROBLEMS BELOW.

EXAMPLE: Eight more than a number is 15. 7

8 + N = 15

N = 15 - 8

N = 7

---

1. Five more than a number is 11.

___ + ___ = ___

___ = ___ - ___

___ = ___

---

2. Four more than a number is 8.

___ + ___ = ___

___ = ___ - ___

___ = ___

---

3. Nine more than a number is 10.

___ + ___ = ___

___ = ___ - ___

___ = ___

---

4. Three more than a number is 5.

___ + ___ = ___

___ = ___ - ___

___ = ___

Name _____ Date _____

Roman Numerals

Solve the problems for Roman Numerals and Numbers.

I=1	II=2	III=3	IV=4	V=5
VI=6	VII=7	VIII=8	IX=9	X=10

III + V = VIII 3 + 5 = 8	IV + V + ☐
IX + VI + ☐	VIII + III + ☐
X − V = V 10 − 5 = 5	VI − III − ☐
VIII − V − ☐	IX − II − ☐

Math Facts Test

Addition and Subtraction

Name _____

Date _____

[redacted]: Solve the problems. REMEMBER: There are addition and subtraction facts. WATCH THE SIGNS!

10 + 2 = ☐	10 - 4 = ☐	16 - 1 = ☐
10 + 1 = ☐	4 + 7 = ☐	5 + 8 = ☐
8 + 5 = ☐	15 - 2 = ☐	16 - 4 = ☐

Chapter 7 Test

Name _____

① What fractional part is shaded?

$\frac{3}{\quad}$

② What fractional part is shaded?

$\frac{5}{\quad}$

③ What is

$\frac{1}{3}$ of 12 ?

_____

④ What is

$\frac{1}{5}$ of 15 ?

_____

⑤ Complete:

$\frac{12}{16} = \frac{6}{8} = \frac{\quad}{4}$

⑥ Complete:

$\frac{8}{18} = \frac{4}{\quad}$